# **Overviews of NMFS Fishery-Dependent Data Source Surveys Referenced in the SEDAR 24 Data Workshop Report**

# Contents

- 1. Accumulated Landings System
- 2. Southeast Headboat Survey
- 3. Fisheries Logbook System
- 4. Trip Interview Program

# 1. Accumulated Landings System (ALS)

Agency:	NOAA Fisheries Southeast Fisheries Science Center
Type:	Commercial Statistics Landings
Source:	http://www.sefsc.noaa.gov/alsprogram.jsp

These data consist of information on the quantity and value of seafood products caught by fishermen and sold to established seafood dealers or brokers. These data are reported by dealers or brokers to the fisheries agency in each state. The National Marine Fisheries Service (NMFS) in the Southeast Region has established cooperative agreements with all of the states in the Southeast and rely on the states to collect and process these data. The general canvass data set maintained by the NMFS, Southeast Fisheries Science Center (SEFSC) is a continuous data set that begins in 1960. Landings data for some species and areas go further back in time and are available in print in the <u>Fisheries of the United States</u>.

The landings data, maintained by the SEFSC, are monthly totals of the quantities landed and the value of the landings for each species. Because these data are summaries, they do not contain information on the identification of the fishermen or vessel. However, several states in the Southeast do collect landings statistics for individual trips. The state of Florida was the first to implement a trip ticket program in 1985. In 1995, the state of North Carolina passed a license to sell law that required seafood dealers to report all landings statistics by trip and identify the vessel or individual that sold the product. In 1997, the state of Louisiana initiated their trip ticket program and in 1999 Georgia also initiated a trip ticket program. In addition to the quantity and value (or price per pound), information on the gear used to catch the fish and the area where the

fishing occurred are also recorded in the general canvass data. Because the quantity and value data are collected from seafood dealers, the information on gear and fishing location are estimated and added to the data by data collection specialists. In some states, this ancillary data is not available.

Fisheries statistics for the United States are available online through the National Marine Fisheries Statistics home page. To connect to this site, click on <u>Commercial Fishery Statistics</u>.

In many coastal areas, trained field agents assist with the collection of fisheries statistics. These individuals are strategically located so they can maintain contact with the fishermen and are integrally involved with the fishing communities. Among other duties, these port agents provide information on the types of gear, fishing area and distance from shore for the general canvass data. The port agents are also involved in the collection of Gulf shrimp statistics, biological data collection and the operating unit survey. There are two shortcomings associated with fishery statistics that are collected from seafood dealers. First, dealers do not always record the specific species that are caught and second, fish or shellfish are not always purchased at the same location where they are unloaded, i.e., landed.

Dealers have always recorded fishery products in ways that meet their needs, which sometimes make it ambiguous for scientific uses. Although the port agents can readily identify individual species, they usually are not at the fish house when fish were being unloaded and thus, cannot observe and identify the fish. Species identification is a critical part of the biological sampling program (also known as the <u>Trip Interview Program</u>) operated jointly by the National Marine Fisheries and the fishery agency in each coastal state in the Southeast Region.

The second problem is accurate information on the gear used and the location where the fish were caught. For the states with trip ticket programs, information on the gear and area fished is collected on the trip ticket form. For other states, this information is estimated, usually by the local port agent.

To improve the quality of data on fishing effort and location, the Southeast Fisheries Science Center implemented vessel logbooks for several federally managed fisheries. For more information on the vessel logbook programs, click here <u>Fisheries Logbook Program</u>.

#### 2. Southeast Headboat Survey

Agency:	National Marine Fisheries Service Southeast Fisheries Science Center
Туре:	Recreational, for Hire Catch, Effort, Biological
Source:	http://www.sefsc.noaa.gov/headboatsurveyprogram.jsp

Researchers at NOAA Beaufort Laboratory have studied reef fish off the southeastern United States since the late 1960's and have addressed both applied fishery issues and basic reef fish ecology. The Laboratory's Southeast Region Headboat Survey collects fisheries and biological data to support stock management activities. Approximately 165 vessels are monitored throughout the southeast, and in 1996, biological samples were collected from 37, 435 fishes of 124 species.

These data sets are also used to examine patterns in the fishery and to study the structure and distribution of reef fish communities.

## 3. Program: Fisheries Logbook System

Agency:	NOAA Fisheries Southeast Fisheries Science Center
Type:	Commercial Statistics Landings, Effort
Source:	http://www.sefsc.noaa.gov/fls.jsp

The Fisheries Logbook System records the fishing and non-fishing activity of fishermen who are required to report their fishing activity via logbooks submitted for each trip. As the need for conservation of the Nation's marine resources increases the need for more and better quality data on how these resources are utilized also increases.

One of the most useful types of data is catch per unit effort. To meet these needs, the Southeast Fisheries Science Center has implemented several vessel logbook programs. In 1986, a comprehensive program was initiated for the pelagic longline fisheries along the eastern seaboard, in the Gulf of Mexico and in the Caribbean. In 1990, logbook reporting was initiated for the vessels catching species in the reef fish management plan (Gulf of Mexico Fishery Management Council) Similar to the logbook program for reef fish, a program for vessels catching species in the South Atlantic snapper-grouper fishery management plan (South Atlantic Fishery Management Council) was initiated in 1992. In 1993, a comprehensive logbook was initiated for the federally managed shark fisheries (Highly Migratory Species, National Marine Fisheries Service). In 1999, logbook reporting was initiated for vessels catching king and Spanish mackerel (Gulf of Mexico and South Atlantic Fishery Management Councils).

Although these programs were initiated at various times and cover many different fisheries and types of gear, the SEFSC has attempted to make the logbooks relatively easy to complete. There are 2 types of reporting forms currently in use (although separate forms are used for the limited vessels that are permitted in the wreckfish and golden crab fisheries).

One form is used for the pelagic longline fisheries. Because this fishery uses gear that are set (deployed) for a relatively long period (6 to 10 hours), catch and effort data are collected for each set. Thus, a separate form is required for each set. Fishermen are required to report the numbers of each species caught, the numbers of animals retained or discarded alive or discarded dead (longline gear is nonselective and unwanted or prohibited species such as, billfishes, sea turtles, etc., must be returned to the water), the location of the set, the types and size of gear, and the duration of the set.

Because some of the needed catch/effort information for pelagic longline fisheries remains the same for the entire trip (i.e., it would be redundant to report it for every set), a supplemental form is used to report this type of data. Information on the port of departure and return, unloading dealer and location, number of sets, number of crew, date of departure and landing are reported on the Trip Summary form. In addition, information on costs associated with the trip can be reported on this form.

This type of economic data is critical to the evaluation of existing and proposed management regulations. The National Marine Fisheries Service is required by law to assess (estimate) the economic consequences of proposed management regulations. Without accurate data from the fishing industry, such estimates are not likely to reflect the true effects.

The second type of logbook form is used to report catch and effort data for the Gulf reef fish, South Atlantic snapper-grouper, coastal shark and king and Spanish mackerel fisheries. Because the soak time for these fisheries is relatively short, it is infeasible to require fishermen to complete a separate form every time the gear is deployed. Thus, the catch and effort data for the entire trip are reported on a single form (i.e., one form per trip).

The types of information required on this trip form are nearly the same as the pelagic longline logbook. Information on the quantity (reported in pounds) caught for each species, the area of catch, the type and quantity of gear, the date of departure and return, the dealer and location (county and state where the trip is unloaded), the duration of the trip (time away from dock), an estimate of the fishing time, and the number of crew are included on this form.

In response to the increased need for data on the amount of fish that are discarded, the Southeast Fisheries Science Center is now using a supplementary form that selected fishermen use to report quantities of fish that are discarded. Comments on the program can be submitted to the Logbook Program care of the Southeast Fisheries Science Center, 75 Virginia Beach Drive, Miami Florida 33149 or via email at sefsc.logbook@noaa.gov.

## 4. Program: Trip Interview Program

Agency:	NOAA Fisheries Southeast Fisheries Science Center
Type: Com	mercial Statistics Biological
Source:	http://www.sefsc.noaa.gov/tip.jsp

Estimates of the age distribution of fish in the population and how the distribution has changed over time is critical information for the assessment of the population. To estimate the age distribution, the Southeast Fisheries Science Center has developed the Trip Interview Program (TIP). Like the other statistics gathering programs, this one is also a joint or cooperative effort with the state fishery agencies in the Southeast Region.

The Trip Interview Program was principally developed to provide two types of information - size frequency data and age at length data. In addition, this program also provides catch per unit effort data and information on the composition of the species being caught and landed.

The collection of data for this program is conducted by port agents located in coastal area in the South Atlantic and Gulf of Mexico. These field biologists visit docks and fish houses to interview the fishermen and take length and weight samples from their catch. For some trips, the port agents are at the location when the fish are being unloaded and can measure and weigh individual fish as they are being unloaded. At other times, the fish have already been unloaded and the port agent is given permission to measure and weigh a sample of the catch from the storage containers at the fish houses. In addition to the length and weight data, the port agents also attempt to interview the captain or a crew member to collect data on the fishing trip - i.e., fishing area, type and quantity of gear, fishing time, etc.

The port agents also take hard part and tissue samples for some of the fish they measure. These samples are sent to one of two Southeast Fisheries Science Center laboratories for biologists to analyze and determine the age of the fish. The age, along with the length of the fish, are used to determine the age-at-length for a sample of the fish population, which then is used to estimate the age distribution for the entire population or stock of the species.